```
                                                    ▼
Tryptase α     MLSLLLLALP VLASRAYAAP APVQALQQAG IVGGQEAPRS KWPWQVSLRV RDRYWMHFCG  (30)
Tryptase β-I   --N------- ---------- --G----RV- ---------- ---------- HGP-------
Tryptase β-II  --N------- ---------- --G----RV- ---------- ---------- HGP-------
                                                                    ------------
                                                                          A

Tryptase α     GSLIHPQWVL TAAHCLGPDV KDLATLRVQL REQHLYYQDQ LLPVSRIIVH PQFYIIQTGA  (90)
Tryptase β-I   ---------- -----V---- ----A----- ---------- ---------- ----TA-I--
Tryptase β-II  ---------- -----V---- ----A----- ---------- ---------- ----TA-I--
                            ------                                        ------
                               B                                             C

Tryptase α     DIALLELEEP VNISSRVHTV MLPPASETFP PGMPCWVTGW GDVDNDEPLP PPFPLKQVKV  (150)
Tryptase β-I   ---------- --V--H---- T--------- ---------- -------R-- ----------
Tryptase β-II  ---------- -KV--H---- T--------- ---------- -------R-- ----------
                                         ----
                                          D

Tryptase α     PIMENHICDA KYHLGAYTGD DVRIIRDDML CAGNSQRDSC KGDSGGPLVC KVNGTWLQAG  (210)
Tryptase β-I   ---------- ---------- ----V----- ----TR---- Q--------- ----------
Tryptase β-II  ---------- ---------- ----V----- ----TR---- Q--------- ----------
                             ----------                 ---------
                                 3                          1

Tryptase α     VVSWDEGCAQ PNRPGIYTRV TYYLDWIHHY VPKKP
Tryptase β-I   ----G----- ---------- ---------- -----
Tryptase β-II  ----G----- ---------- ---------- -----
               --------
                  2
```

FIG. 1

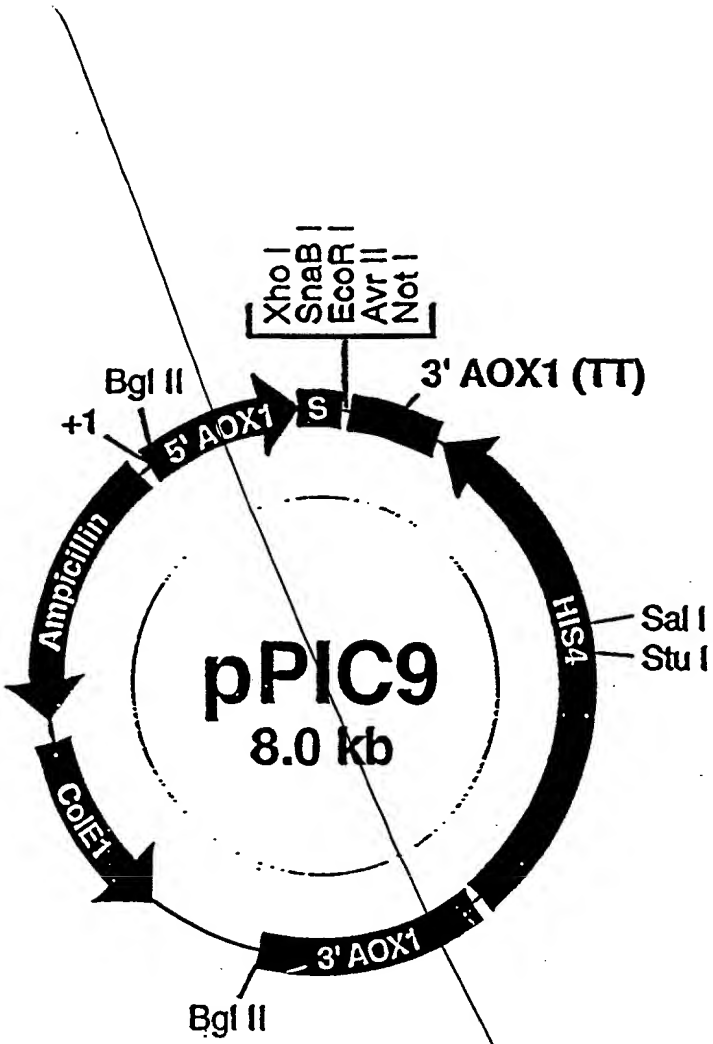

Xho I
SnaB I
EcoR I
Avr II
Not I
3' AOX1 (TT)
Bgl II
+1
5' AOX1
S
Ampicillin
pPIC9
8.0 kb
HIS4
Sal I
Stu I
ColE1
3' AOX1
Bgl II

FIG. 2

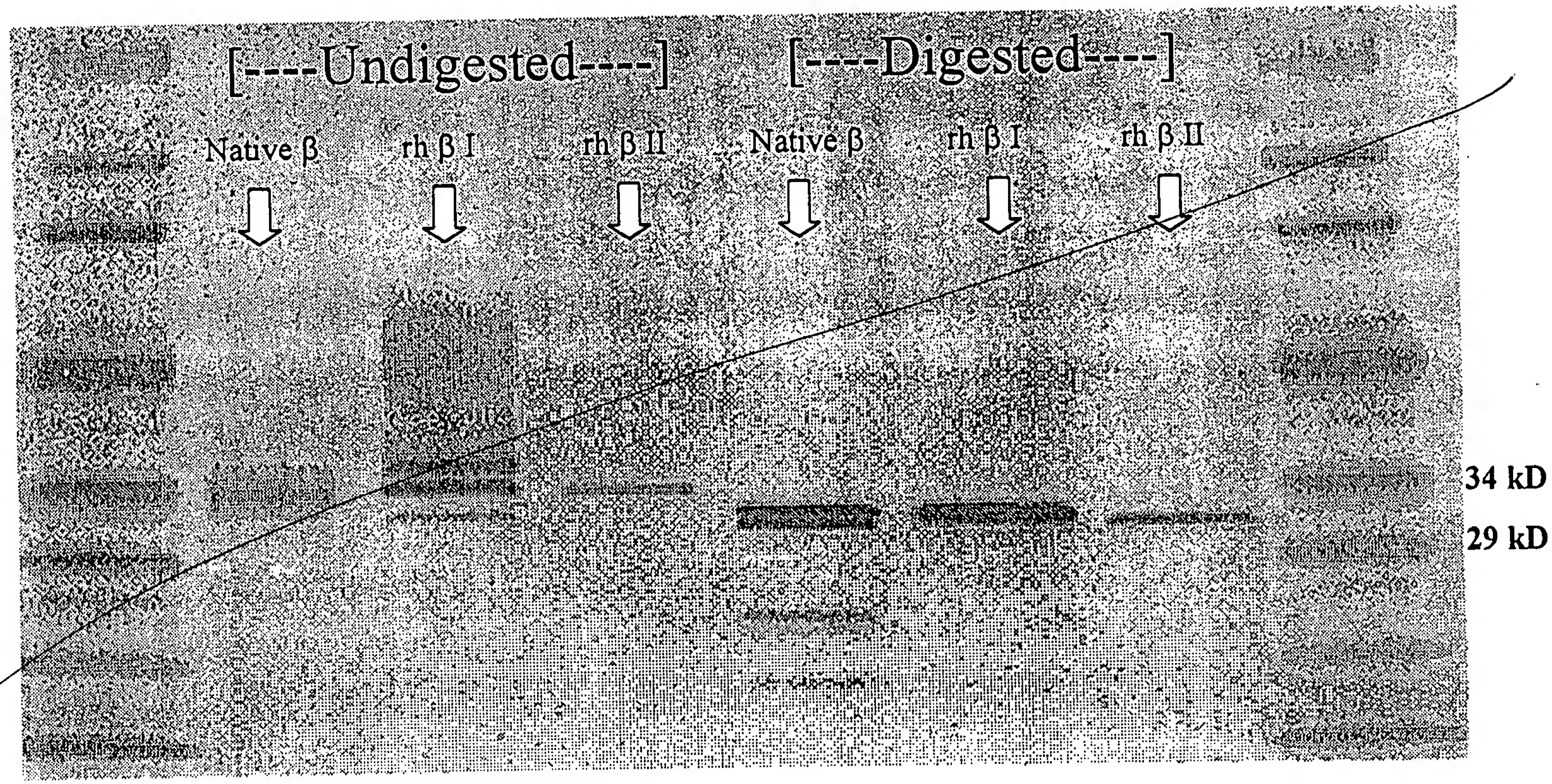

[----Undigested----]
[----Digested----]
Native β
rh β I
rh β II
Native β
rh β I
rh β II
34 kD
29 kD

FIG. 3

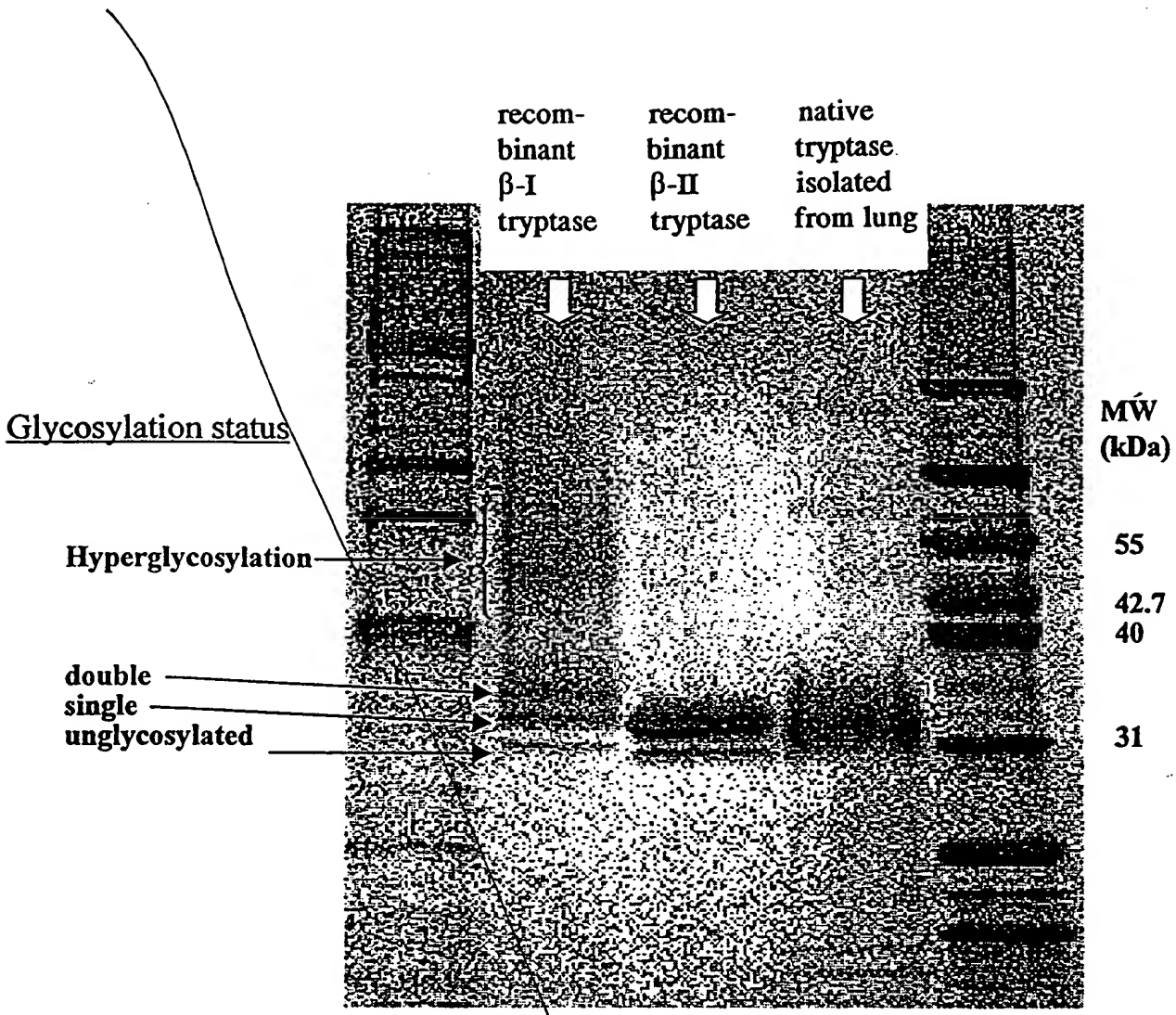
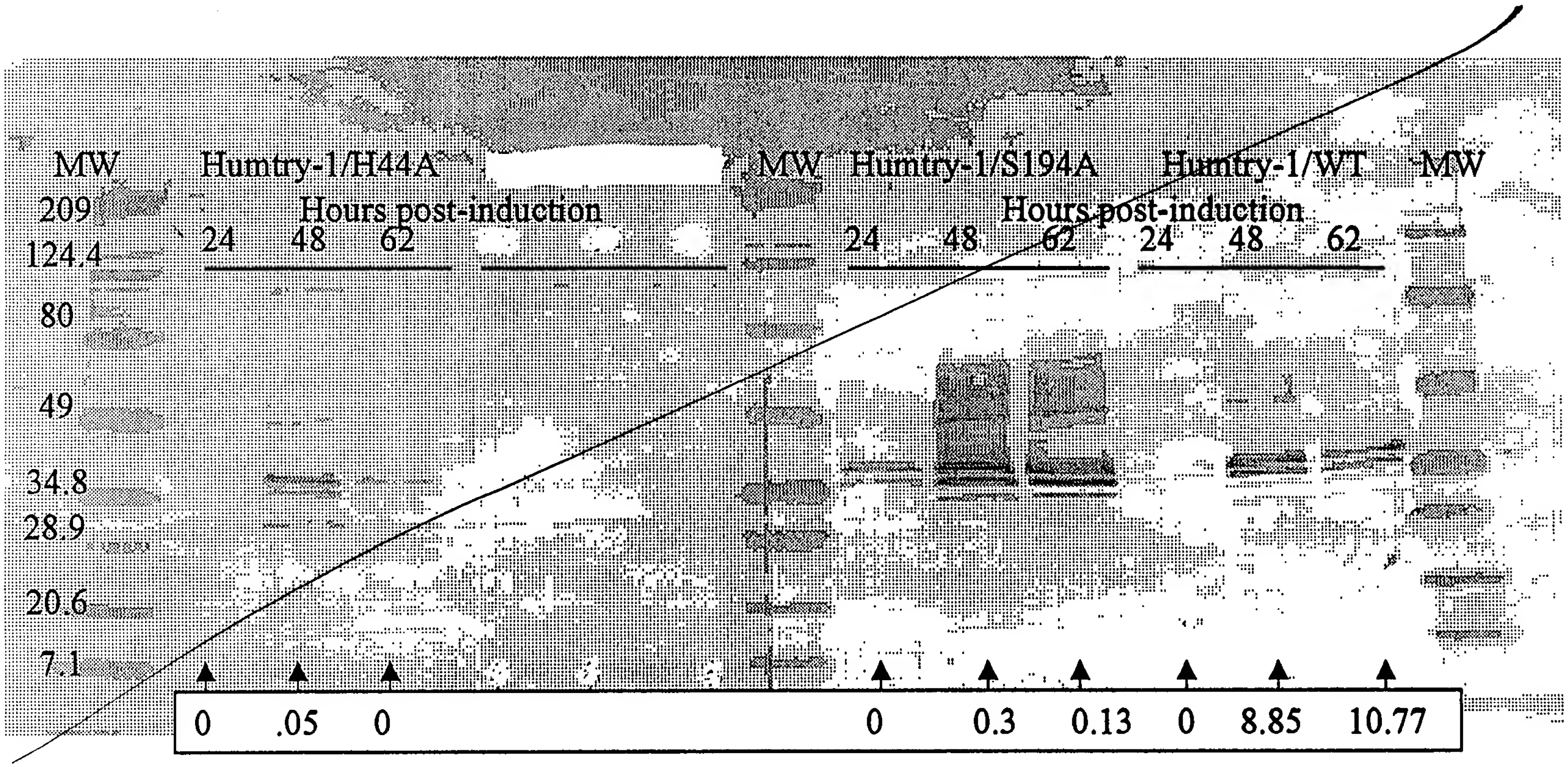

recom-
binant
β-I
tryptase
recom-
binant
β-II
tryptase
native
tryptase
isolated
from lung
Glycosylation status
Hyperglycosylation
double
single
unglycosylated
MW
(kDa)
55
42.7
40
31

FIG. 4



Corresponding Units/ml/min by CBZ-Lys-S-Thiobenzyl Ester/DNTB Coupled Cleavage Assay

FIG. 5

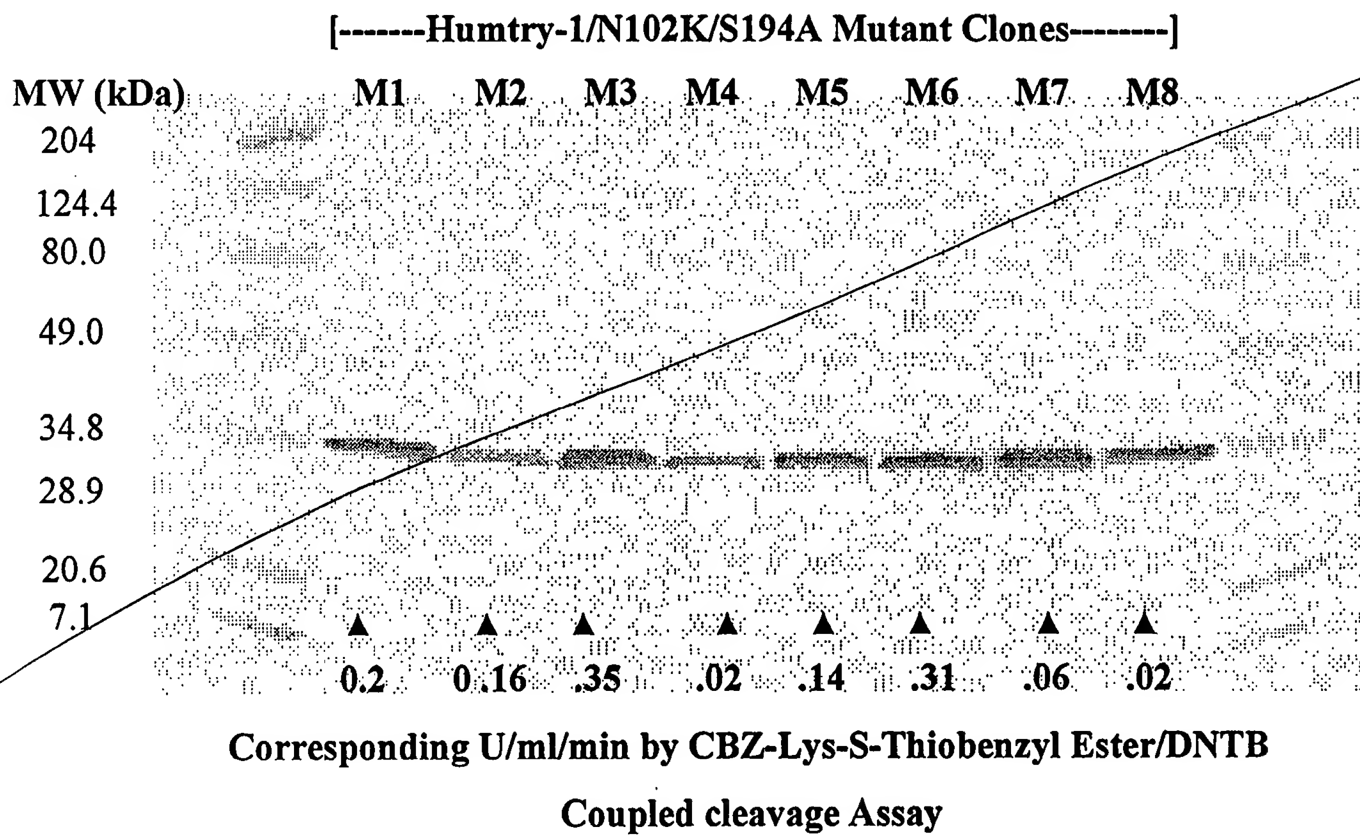

[-------Humtry-1/N102K/S194A Mutant Clones--------]
MW (kDa)
M1
M2
M3
M4
M5
M6
M7
M8
204
124.4
80.0
49.0
34.8
28.9
20.6
7.1
0.2
0.16
.35
.02
.14
.31
.06
.02
Corresponding U/ml/min by CBZ-Lys-S-Thiobenzyl Ester/DNTB
Coupled cleavage Assay

FIG. 6

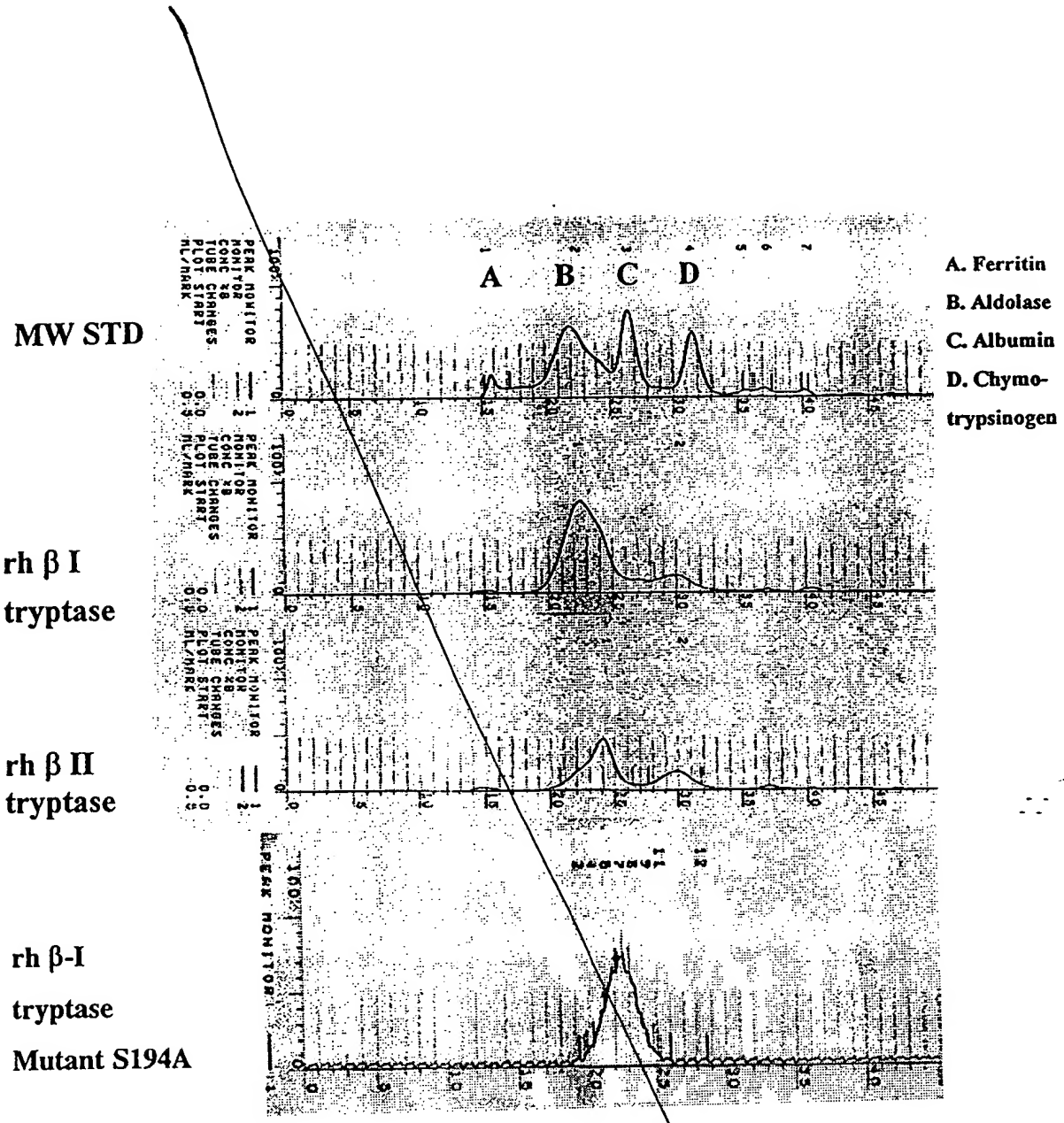

MW STD
rh β I tryptase
rh β II tryptase
rh β-I tryptase Mutant S194A
A
B
C
D
A. Ferritin
B. Aldolase
C. Albumin
D. Chymo-trypsinogen

FIG. 7

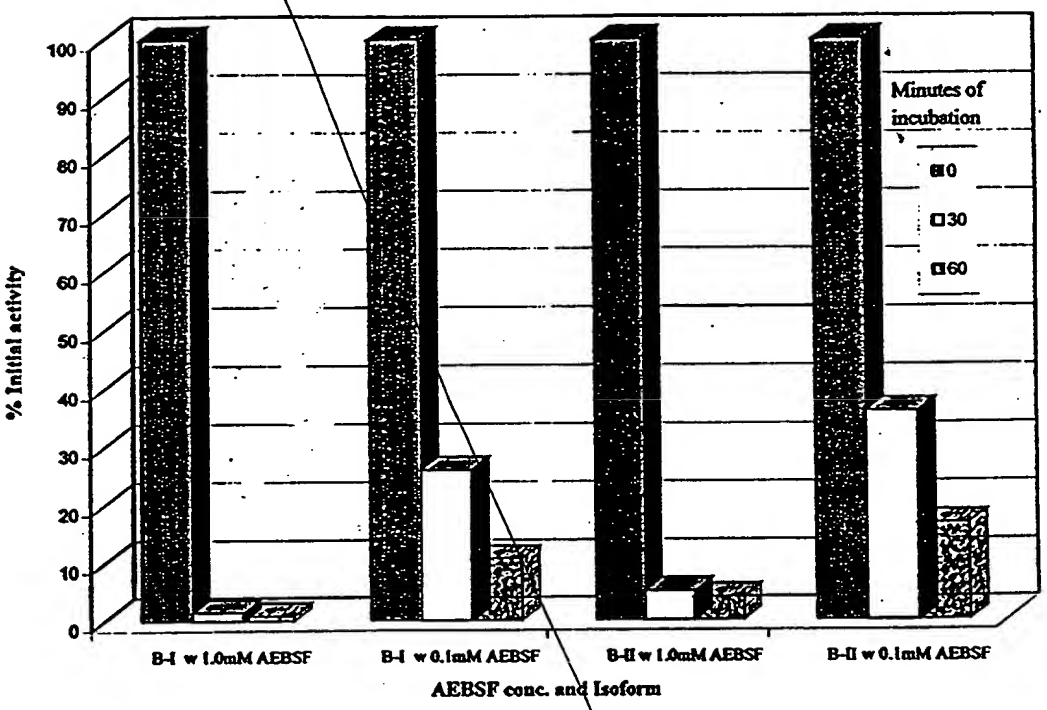

% Initial activity
100
90
80
70
60
50
40
30
20
10
0
Minutes of incubation
0
30
60
B-I w 1.0mM AEBSF
B-I w 0.1mM AEBSF
B-II w 1.0mM AEBSF
B-II w 0.1mM AEBSF
AEBSF conc. and Isoform

FIG. 8

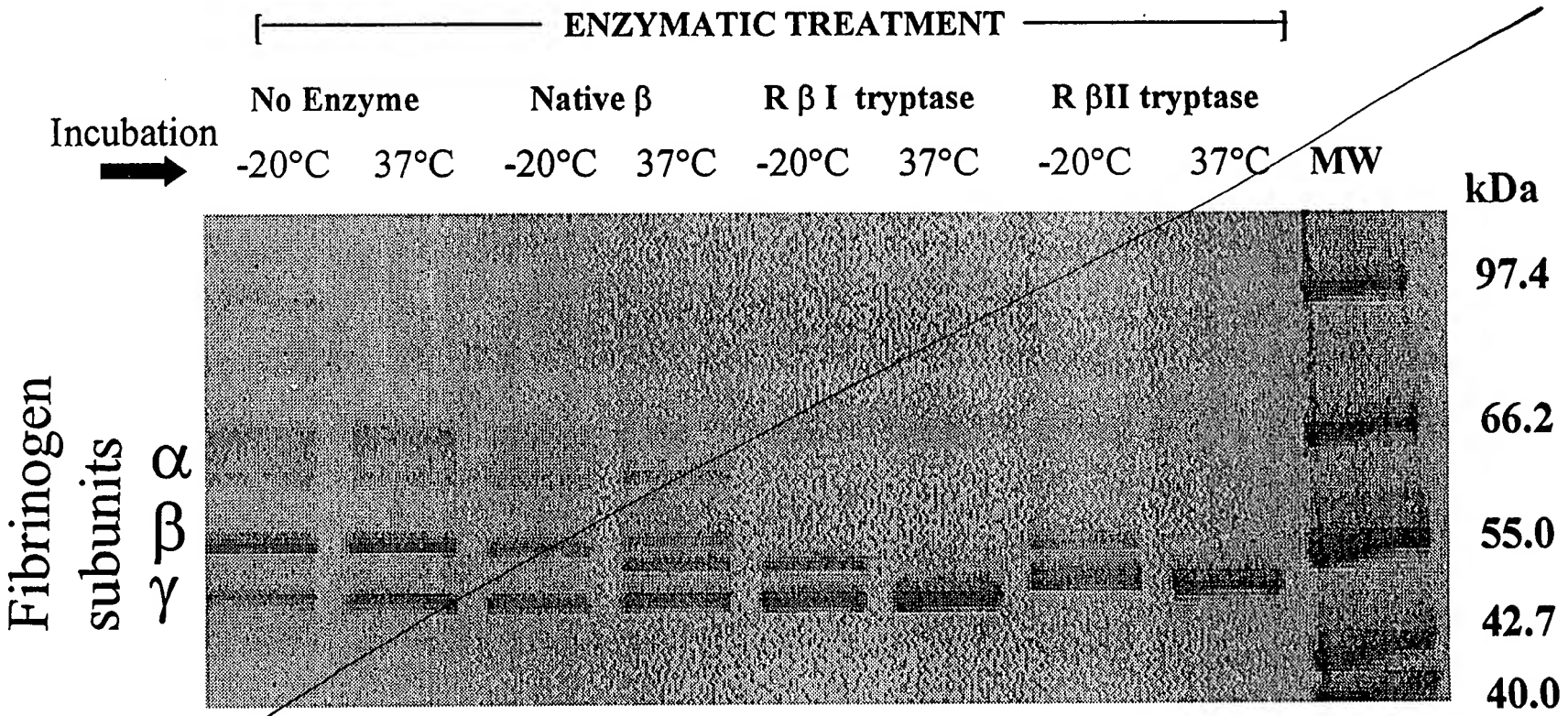


FIG. 9